15) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT SIR MV LAYOUT, SIDDIVINAYAKA, ANANDA LAYOUT AND SURROUNDING AREAS IN WARD NO. 09 (VIDYARANYAPURA), VIDYARANYAPURA SUB DIVISION

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BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 03

(PACKAGE CONSISTS OF 21 WORKS IN WARD NO 08 AND WARD NO 09)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT SIR MV LAYOUT, SIDDIVINAYAKA, ANANDA LAYOUT AND SURROUNDING AREAS IN WARD NO. 09 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	SIR M.V LAYOUT								
	2nd main road(ganesh temple road or gas godown)	Cum	2	440.90	0.70	0.40	246.90		
	13th cross (upto 5th main ananda layout)	Cum	2	345.20	0.70	0.40	193.31		
	12th cross (upto 4th main ananda layout)	Cum	2	350.30	0.60	0.40	168.14		
	10th cross	Cum	2	37.40	0.60	0.40	17.95		
	9th cross	Cum	2	147.40	0.70	0.40	82.54		
	8th cross	Cum	2	150.70	0.70	0.40	84.39		
	7th cross	Cum	2	93.50	0.70	0.40	52.36		
	2nd main, 2nd cross road	Cum	1	305.80	0.70	0.40	85.62		
	2nd main 5'A cross road	Cum	2	111.30	0.60	0.40	53.42		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**984.66**	**166.42**	**163866.45**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Open Drain (Sides & Bottom)	Width=Perimeter of Drain in U Shape							
	Drain slab								
	SIR M.V LAYOUT								
	2nd main road(ganesh temple road or gas godown)	Sqm	2	440.90	1.80		1587.24		
	13th cross (upto 5th main ananda layout)	Sqm	2	345.20	1.80		1242.72		
	12th cross (upto 4th main ananda layout)	Sqm	2	350.30	1.80		1261.08		
	10th cross	Sqm	2	37.40	1.80		134.64		
	9th cross	Sqm	2	147.40	1.80		530.64		
	8th cross	Sqm	2	150.70	1.80		542.52		
	7th cross	Sqm	2	93.50	1.80		336.60		
	2nd main, 2nd cross road	Sqm	1	305.80	1.80		550.44		
	2nd main 5'A cross road	Cum	2	111.30	1.80		400.68		
	Sub Total						**6586.56**		
	Consider 5% Qnty for Removing						**329.33**		
	Basic rate							62.00	

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	Area weightage 6%								3.72	
	Total							**329.33**	**65.72**	**21643.44**
3	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete.(P.No.25,I.No.5.31.2)									
	Open Drain (Sides & Bottom)									
	Drain slab									
	SIR M.V LAYOUT									
	2nd main road(ganesh temple road or gas godown)	Sqm	2	440.90	1.80		1587.24			
	13th cross (upto 5th main ananda layout)	Sqm	2	345.20	1.80		1242.72			
	12th cross (upto 4th main ananda layout)	Sqm	2	350.30	1.80		1261.08			
	10th cross	Sqm	2	37.40	1.80		134.64			
	9th cross	Sqm	2	147.40	1.80		530.64			
	8th cross	Sqm	2	150.70	1.80		542.52			
	7th cross	Sqm	2	93.50	1.80		336.60			
	2nd main, 2nd cross road	Sqm	1	305.80	1.80		550.44			
	2nd main 5'A cross road	Cum	2	111.30	1.80		400.68			
	Sub Total						**6586.56**			
	Consider 5% Qnty for Refixing						**329.33**			
	Basic rate								779.00	
	Area weightage 6%								46.74	
	Total						**329.33**		**825.74**	**271939.30**
4	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)									
	Considered same Qty vide I.No.1	Cum					984.66			
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.00 Tonne/Km.) For 15 Kms = (2.50 x 1.28 x 15)/-		48.00							
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00							
	Total rate per Cum		116.00							
	Basic rate								116.00	
	Area weightage 6%								6.96	
	Total						**984.66**		**122.96**	**121073.30**
5	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).									
	For Road surface									
	SIR M.V LAYOUT									
	2nd main road(ganesh temple road or gas godown)	Sqm	1	440.90	6.00		2645.40			

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	13th cross (upto 5th main ananda layout)	Sqm	1	345.20	5.50		1898.60		
	12th cross (upto 4th main ananda layout)	Sqm	1	350.30	4.20		1471.26		
	10th cross	Sqm	1	37.40	4.80		179.52		
		Sqm	1	124.30	3.00		372.90		
	9th cross	Sqm	1	147.40	4.95		729.63		
	8th cross	Sqm	1	150.70	4.80		723.36		
	7th cross	Sqm	1	93.50	3.95		369.33		
	1st main road	Sqm	1	66.11	4.10		271.05		
	2nd main, 2nd cross road	Sqm	1	305.80	4.60		1406.68		
	2nd main 5'A cross road	Sqm	1	111.30	4.80		534.24		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**10601.97**	**3.18**	**33714.25**
6	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	SIR M.V LAYOUT								
	2nd main road(ganesh temple road or gas godown)	Sqm	1	440.90	6.00		2645.40		
	13th cross (upto 5th main ananda layout)	Sqm	1	345.20	5.50		1898.60		
	12th cross (upto 4th main ananda layout)	Sqm	1	350.30	4.20		1471.26		
	10th cross	Sqm	1	37.40	4.80		179.52		
		Sqm	1	124.30	3.00		372.90		
	9th cross	Sqm	1	147.40	4.95		729.63		
	8th cross	Sqm	1	150.70	4.80		723.36		
	7th cross	Sqm	1	93.50	3.95		369.33		
	1st main road	Sqm	1	66.11	4.10		271.05		
	2nd main, 2nd cross road	Sqm	1	305.80	4.60		1406.68		
	2nd main 5'A cross road	Sqm	1	111.30	4.80		534.24		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**10601.97**	**12.72**	**134857.01**
7	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	SIR M.V LAYOUT								
	2nd main road(ganesh temple road or gas godown)	Cum	1	440.90	6.00	0.04	105.82		
	13th cross (upto 5th main ananda layout)	Cum	1	345.20	5.50	0.04	75.94		

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	12th cross (upto 4th main ananda layout)	Cum	1	350.30	4.20	0.04	58.85		
	10th cross	Cum	1	37.40	4.80	0.04	7.18		
		Cum	1	124.30	3.00	0.04	14.92		
	9th cross	Cum	1	147.40	4.95	0.04	29.19		
	8th cross	Cum	1	150.70	4.80	0.04	28.93		
	7th cross	Cum	1	93.50	3.95	0.04	14.77		
	1st main road	Cum	1	66.11	4.10	0.04	10.84		
	2nd main, 2nd cross road	Cum	1	305.80	4.60	0.04	56.27		
	2nd main 5'A cross road	Cum	1	111.30	4.80	0.04	21.37		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	SIR M.V LAYOUT								
	2nd main road(ganesh temple road or gas godown)	Cum	1	440.90	6.00	0.04	10.58		
	13th cross (upto 5th main ananda layout)	Cum	1	345.20	5.50	0.04	7.59		
	12th cross (upto 4th main ananda layout)	Cum	1	350.30	4.20	0.04	5.89		
	10th cross	Cum	1	37.40	4.80	0.04	0.72		
		Cum	1	124.30	3.00	0.04	1.49		
	9th cross	Cum	1	147.40	4.95	0.04	2.92		
	8th cross	Cum	1	150.70	4.80	0.04	2.89		
	7th cross	Cum	1	93.50	3.95	0.04	1.48		
	1st main road	Cum	1	66.11	4.10	0.04	1.08		
	2nd main, 2nd cross road	Cum	1	305.80	4.60	0.04	5.63		
	2nd main 5'A cross road	Cum	1	111.30	4.80	0.04	2.14		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**466.49**	**8118.54**	**3787189.34**
8	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	466.49	117.00	**4366.31**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**4366.31**	**28.62**	**124963.90**
9	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	SIR M.V LAYOUT								
	2nd main road(ganesh temple road or gas godown)	Sqm	2	440.90	0.10		88.18		
	13th cross (upto 5th main ananda layout)	Sqm	2	345.20	0.10		69.04		
	12th cross (upto 4th main ananda layout)	Sqm	2	350.30	0.10		70.06		
	10th cross	Sqm	2	37.40	0.10		7.48		
		Sqm	2	124.30	0.10		24.86		

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	9th cross	Sqm	2	147.40	0.10		29.48		
	8th cross	Sqm	2	150.70	0.10		30.14		
	7th cross	Sqm	2	93.50	0.10		18.70		
	1st main road	Sqm	2	66.11	0.10		13.22		
	2nd main, 2nd cross road	Sqm	2	305.80	0.10		61.16		
	2nd main 5'A cross road	Sqm	2	111.30	0.10		22.26		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						434.58	542.72	235856.34
								Sub Total	4895103.33
								Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)	100000
								Miscellenious and rounding	4897
								TOTAL AMOUNT	5000000
								RUPEES FIFTY LAKHS ONLY	

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

AE

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

Executive Engineer
Vidyaranyapura Division
Yelahanka Zone, B.B.M.P
Bangalore - 97

Technical Sanction
Accorded For Rs 50.00 lakhs only
Head of A/C P3458....
CER NO 47..... Dt... 29/01/18

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16) IMPROVEMENTS AND ASPHALTING TO MAIN ROAD IN KEMPEGOWDANAGARA IN WARD NO. 09 (VIDYARANYAPURA), VIDYARANYAPURA SUB DIVISION

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BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 03

(PACKAGE CONSISTS OF 21 WORKS IN WARD NO 08 AND WARD NO 09)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO MAIN ROAD IN KEMPEGOWDANAGARA IN WARD NO. 09 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	IEHCS LAYOUT								
	6th Main Road	Cum	2	353	0.70	0.40	197.71		
	7th Main Road	Cum	2	219	0.70	0.40	122.42		
	DEFENCE LAYOUT								
	8th Road	Cum	2	339	0.70	0.40	189.73		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**509.85**	**166.42**	**84849.57**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Open Drain (Sides & Bottom)	Width=Perimeter of Drain in U Shape							
	Drain slab								
	IEHCS LAYOUT								
	6th Main Road	Sqm	2	353	1.80		1270.98		
	7th Main Road	Sqm	2	219	1.80		786.96		
	DEFENCE LAYOUT								
	8th Road	Sqm	2	339	1.80		1219.68		
	Sub Total						**3277.62**		
	Consider 5% Qnty for Removing						**163.88**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**163.88**	**65.72**	**10770.26**
3	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	Open Drain (Sides & Bottom)								
	Drain slab								
	IEHCS LAYOUT								
	6th Main Road	Sqm	2	353	1.80		1270.98		
	7th Main Road	Sqm	2	219	1.80		786.96		
	DEFENCE LAYOUT								
	8th Road	Sqm	2	339	1.80		1219.68		
	Sub Total						**3277.62**		
	Consider 5% Qnty for Refixing						**163.88**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**163.88**	**825.74**	**135323.10**
4	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								

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	Road cutting portions								
	DEFENCE LAYOUT								
	8th Road	Cum	1	171.60	1.00	0.23	39.47		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**39.47**	**86.92**	**3430.56**
5	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.4	Cum					549.32		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.50 Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**549.32**	**122.96**	**67544.39**
6	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	Road cutting portions								
	DEFENCE LAYOUT								
	8th Road	Sqm	1	171.60	1.00		171.60		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**171.60**	**13.78**	**2364.65**
7	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502. (P.No.161, I.No.21.6)								
	Considered same Above Qty	Sqm					171.60		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						**171.60**	**27.56**	**4729.30**
8	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	DEFENCE LAYOUT								
	8th Road	Cum	1	171.60	1.00	0.05	8.58		
	Sub Total						**8.58**		

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	Consider 5% qty for Profile correction and Dipression filling						0.43		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**9.01**	**7120.02**	**64144.26**
9	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to Tennis court	Sqm	1	227.50	5.20		1183.00		
	IEHCS LAYOUT								
	6th Main Road	Sqm	1	353.05	5.60		1977.08		
	7th Main Road	Sqm	1	218.60	5.20		1136.72		
	DEFENCE LAYOUT								
	8th Road	Sqm	1	338.80	6.00		2032.80		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**6329.60**	**3.18**	**20128.13**
10	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to Tennis court	Sqm	1	227.50	5.20		1183.00		
	IEHCS LAYOUT								
	6th Main Road	Sqm	1	353.05	5.60		1977.08		
	7th Main Road	Sqm	1	218.60	5.20		1136.72		
	DEFENCE LAYOUT								
	8th Road	Sqm	1	338.80	6.00		2032.80		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**6329.60**	**12.72**	**80512.51**
11	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to Tennis court	Cum	1	227.50	5.20	0.04	47.32		
	IEHCS LAYOUT								
	6th Main Road	Cum	1	353.05	5.60	0.04	79.08		
	7th Main Road	Cum	1	218.60	5.20	0.04	45.47		
	DEFENCE LAYOUT								

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	8th Road	Cum	1	338.80	6.00	0.04	81.31		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to Tennis court	Cum	1	227.50	5.20	0.04	4.73		
	IEHCS LAYOUT								
	6th Main Road	Cum	1	353.05	5.60	0.04	7.91		
	7th Main Road	Cum	1	218.60	5.20	0.04	4.55		
	DEFENCE LAYOUT								
	8th Road	Cum	1	338.80	6.00	0.04	8.13		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**278.50**	**8118.54**	**2261032.87**
12	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	278.50	117.00	**2606.78**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**2606.78**	**28.62**	**74606.11**
13	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to Tennis court	Sqm	2	227.50	0.10		45.50		
	IEHCS LAYOUT								
	6th Main Road	Sqm	2	353.05	0.10		70.61		
	7th Main Road	Sqm	2	218.60	0.10		43.72		
	DEFENCE LAYOUT								
	8th Road	Sqm	2	338.80	0.10		67.76		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**227.59**	**542.72**	**123517.64**
								Sub Total	**2932953.35**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								60000
	Miscellenious and rounding								7047
	TOTAL AMOUNT								**3000000**
	RUPEES THIRTY LAKHS ONLY								

Technical Sanction Accorded for Rs30.00 lacs only
P3158
48
29/01/18

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

Executive Engineer
Vidyaranyapura Sub Division
Yelahanka Zone, BBMP

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17) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT HMT LAYOUT, IECHS LAYOUT AND SURROUNDING AREAS IN WARD NO. 09 (VIDYARANYAPURA), VIDYARANYAPURA SUB DIVISION

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BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 03

(PACKAGE CONSISTS OF 21 WORKS IN WARD NO 08 AND WARD NO 09)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT HMT LAYOUT, IECHS LAYOUT AND SURROUNDING AREAS IN WARD NO. 09 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	HMT LAYOUT								
	1st Block 12th Main Road	Cum	2	208.90	0.70	0.40	116.98		
	1st Block 13th Main Road	Cum	2	206.20	0.70	0.40	115.47		
	1st Block 8th Main Road	Cum	2	153.90	0.60	0.40	73.87		
	1st Block 14th Main Road	Cum	2	154.00	0.70	0.40	86.24		
	2nd Block 13th Main Road	Cum	2	271.70	0.70	0.40	152.15		
	2nd Block 3rd Cross Road	Cum	2	155.20	0.70	0.40	86.91		
	2nd Block 5th Cross Road	Cum	2	192.00	0.60	0.40	92.16		
	3rd Block 6th Cross Road	Cum	2	289.00	0.80	0.40	184.96		
	3rd Block 7th Cross Road	Cum	2	205.90	0.60	0.40	98.83		
	3rd Block 8th Cross Road	Cum	2	263.90	0.70	0.40	147.78		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**1155.37**	**166.42**	**192276.34**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Drain slab								
	HMT LAYOUT								
	2nd Block 13th Main Road	Sqm	2	271.70	0.70		380.38		
	2nd Block 3rd Cross Road	Sqm	2	155.20	0.70		217.28		
	Open Drain (Sides & Bottom)	Width=Perimeter of Drain in U Shape							
	HMT LAYOUT								
	1st Block 12th Main Road	Sqm	2	208.90	1.80		752.04		
	1st Block 13th Main Road	Sqm	2	206.20	1.80		742.32		
	1st Block 8th Main Road	Cum	2	153.90	1.80		554.04		
	1st Block 14th Main Road	Sqm	2	154.00	1.80		554.40		
	2nd Block 5th Cross Road	Sqm	2	192.00	1.80		691.20		
	3rd Block 6th Cross Road	Sqm	2	289.00	1.80		1040.40		

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	3rd Block 7th Cross Road	Sqm	2	205.90	1.80		741.24		
	3rd Block 8th Cross Road	Sqm	2	263.90	1.80		950.04		
	Sub Total						**6623.34**		
	Consider 5% Qnty for Removing						**331.17**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**331.17**	**65.72**	**21764.30**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Drain slab								
	HMT LAYOUT								
	2nd Block 13th Main Road	Sqm	2	271.70	0.70		380.38		
	2nd Block 3rd Cross Road	Sqm	2	155.20	0.70		217.28		
	Sub Total						**597.66**		
	Consider 30% Qnty for Removing & Refixing						**179.30**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**179.30**	**80.56**	**14444.25**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	HMT LAYOUT								
	2nd Block 13th Main Road	Sqm	2	271.70	0.70		380.38		
	2nd Block 3rd Cross Road	Sqm	2	155.20	0.70		217.28		
	Sub Total						**597.66**		
	Consider 5% Qnty for Refixing						**29.88**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**29.88**	**665.68**	**19892.52**
5	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	Open Drain (Sides & Bottom)								
	Drain slab								
	HMT LAYOUT								
	1st Block 12th Main Road	Sqm	2	208.90	1.80		752.04		
	1st Block 13th Main Road	Sqm	2	206.20	1.80		742.32		
	1st Block 8th Main Road	Cum	2	153.90	1.80		554.04		
	1st Block 14th Main Road	Sqm	2	154.00	1.80		554.40		
	2nd Block 5th Cross Road	Sqm	2	192.00	1.80		691.20		
	3rd Block 6th Cross Road	Sqm	2	289.00	1.80		1040.40		
	3rd Block 7th Cross Road	Sqm	2	205.90	1.80		741.24		

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	3rd Block 8th Cross Road	Sqm	2	263.90	1.80		950.04		
	Sub Total						**6025.68**		
	Consider 5% Qnty for Refixing						**301.28**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**301.28**	**825.74**	**248782.25**
6	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	Road cutting portions								
	HMT LAYOUT								
	1st Block 8th Main Road	Cum	1	2.50	1.50	0.23	0.86		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**0.86**	**86.92**	**74.97**
7	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.6	Cum					1156.23		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.50 Tonne/Km.) For 15 Kms = (2.00 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**1156.23**	**122.96**	**142170.10**
8	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)								
	Road cutting portions								
	HMT LAYOUT								
	1st Block 8th Main Road	Cum	1	2.50	1.50	0.23	0.86		
	Basic rate							1668.00	
	Area weightage 6%							100.08	
	Total						**0.86**	**1768.08**	**1524.97**
9	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	Road cutting portions								
	HMT LAYOUT								

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	1st Block 8th Main Road	Sqm	1	2.50	1.50		3.75		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						3.75	13.78	51.68
10	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kg/sqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502. (P.No.161, I.No.21.6)								
	Considered same Above Qty	Sqm					3.75		
	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						3.75	27.56	103.35
11	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	HMT LAYOUT								
	1st Block 8th Main Road	Cum	1	2.50	1.50	0.05	0.19		
	Sub Total						**0.19**		
	Consider 5% qty for Profile correction and Dipression filling						**0.01**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**0.20**	**7120.02**	**1401.75**
12	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	HMT LAYOUT								
	1st Block 12th Main Road	Sqm	1	208.90	4.75		992.28		
	1st Block 13th Main Road	Sqm	1	206.20	4.80		989.76		
	1st Block 8th Main Road	Sqm	1	153.90	4.10		630.99		
	1st Block 14th Main Road	Sqm	1	154.00	4.70		723.80		
	2nd Block 13th Main Road	Sqm	1	271.70	4.70		1276.99		
	2nd Block 3rd Cross Road	Sqm	1	155.20	4.60		713.92		
	2nd Block 5th Cross Road	Sqm	1	192.00	4.40		844.80		
	3rd Block 6th Cross Road	Sqm	1	289.00	7.00		2023.00		
	3rd Block 7th Cross Road	Sqm	1	205.90	4.70		967.73		
	3rd Block 8th Cross Road	Sqm	1	263.90	4.90		1293.11		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						10456.38	3.18	33251.27

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13	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	HMT LAYOUT								
	1st Block 12th Main Road	Sqm	1	208.90	4.75		992.28		
	1st Block 13th Main Road	Sqm	1	206.20	4.80		989.76		
	1st Block 8th Main Road	Sqm	1	153.90	4.10		630.99		
	1st Block 14th Main Road	Sqm	1	154.00	4.70		723.80		
	2nd Block 13th Main Road	Sqm	1	271.70	4.70		1276.99		
	2nd Block 3rd Cross Road	Sqm	1	155.20	4.60		713.92		
	2nd Block 5th Cross Road	Sqm	1	192.00	4.40		844.80		
	3rd Block 6th Cross Road	Sqm	1	289.00	7.00		2023.00		
	3rd Block 7th Cross Road	Sqm	1	205.90	4.70		967.73		
	3rd Block 8th Cross Road	Sqm	1	263.90	4.90		1293.11		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**10456.38**	**12.72**	**133005.09**
14	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of								
	HMT LAYOUT								
	1st Block 12th Main Road	Cum	1	208.90	4.75	0.04	39.69		
	1st Block 13th Main Road	Cum	1	206.20	4.80	0.04	39.59		
	1st Block 8th Main Road	Cum	1	153.90	4.10	0.04	25.24		
	1st Block 14th Main Road	Cum	1	154.00	4.70	0.04	28.95		
	2nd Block 13th Main Road	Cum	1	271.70	4.70	0.04	51.08		
	2nd Block 3rd Cross Road	Cum	1	155.20	4.60	0.04	28.56		
	2nd Block 5th Cross Road	Cum	1	192.00	4.40	0.04	33.79		
	3rd Block 6th Cross Road	Cum	1	289.00	7.00	0.04	80.92		
	3rd Block 7th Cross Road	Cum	1	205.90	4.70	0.04	38.71		
	3rd Block 8th Cross Road	Cum	1	263.90	4.90	0.04	51.72		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	HMT LAYOUT								
	1st Block 12th Main Road	Cum	1	208.90	4.75	0.04	3.97		
	1st Block 13th Main Road	Cum	1	206.20	4.80	0.04	3.96		

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	1st Block 8th Main Road	Cum	1	153.90	4.10	0.04	2.52		
	1st Block 14th Main Road	Cum	1	154.00	4.70	0.04	2.90		
	2nd Block 13th Main Road	Cum	1	271.70	4.70	0.04	5.11		
	2nd Block 3rd Cross Road	Cum	1	155.20	4.60	0.04	2.86		
	2nd Block 5th Cross Road	Cum	1	192.00	4.40	0.04	3.38		
	3rd Block 6th Cross Road	Cum	1	289.00	7.00	0.04	8.09		
	3rd Block 7th Cross Road	Cum	1	205.90	4.70	0.04	3.87		
	3rd Block 8th Cross Road	Cum	1	263.90	4.90	0.04	5.17		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**460.08**	**8118.54**	**3735181.94**
15	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	460.08	117.00	**4306.35**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**4306.35**	**28.62**	**123247.84**
16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	HMT LAYOUT								
	1st Block 12th Main Road	Cum	2	208.90	0.10		41.78		
	1st Block 13th Main Road	Cum	2	206.20	0.10		41.24		
	1st Block 8th Main Road	Cum	2	153.90	0.10		30.78		
	1st Block 14th Main Road	Cum	2	154.00	0.10		30.80		
	2nd Block 13th Main Road	Cum	2	271.70	0.10		54.34		
	2nd Block 3rd Cross Road	Cum	2	155.20	0.10		31.04		
	2nd Block 5th Cross Road	Cum	2	192.00	0.10		38.40		
	3rd Block 6th Cross Road	Cum	2	289.00	0.10		57.80		
	3rd Block 7th Cross Road	Cum	2	205.90	0.10		41.18		

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	3rd Block 8th Cross Road	Cum	2	263.90	0.10		52.78		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						420.14	542.72	228018.38
								Sub Total	4895190.99
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								100000
	Miscellenious and rounding								4809
	TOTAL AMOUNT								5000000
	RUPEES FIFTY LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

AE

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

Executive Engineer
Byatarayanapura Division
Yalahanka Zone, B.B.M.P.
Bangalore-560092

Technical Sanction
Accorded For Rs 50.00 lakhs only
Head of A/C P3158.....
CER NO :.....49..... Dt...29/01/18

JA

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18) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT TELECOM LAYOUT, GANESHNAGARA AND SURROUNDING AREAS IN WARD NO. 09 (VIDYARANYAPURA), VIDYARANYAPURA SUB DIVISION

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BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 03

(PACKAGE CONSISTS OF 21 WORKS IN WARD NO 08 AND WARD NO 09)

NAME OF WORK :IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT TELECOM LAYOUT, GANESHNAGARA AND SURROUNDING AREAS IN WARD NO. 09 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	GANESHA LAYOUT								
	Sri ram shrayas appartment, Telecom main road (more junction to dead end)	Cum	2	638.40	0.75	0.40	383.04		
	6th cross road	Cum	2	169.84	0.70	0.40	95.11		
	7th cross road	Cum	2	185.90	0.60	0.40	89.23		
	8th cross road	Cum	2	175.90	0.60	0.40	84.43		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**651.81**	**166.42**	**108474.95**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Open Drain (Sides & Bottom)	Width=Perimeter of Drain in U Shape							
	Drain slab								
	GANESHA LAYOUT								
	Sri ram shrayas appartment, Telecom main road (more junction to dead end)	Sqm	2	638.40	1.80		2298.24		
	6th cross road	Sqm	2	169.84	1.80		611.42		
	7th cross road	Sqm	2	185.90	1.80		669.24		
	8th cross road	Sqm	2	175.90	1.80		633.24		
	Sub Total						**4212.14**		
	Consider 5% Qnty for Removing						**210.61**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**210.61**	**65.72**	**13841.11**
3	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	Open Drain (Sides & Bottom)								
	Drain slab								
	GANESHA LAYOUT								
	Sri ram shrayas appartment, Telecom main road (more junction to dead end)	Sqm	2	638.40	1.80		2298.24		
	6th cross road	Sqm	2	169.84	1.80		611.42		
	7th cross road	Sqm	2	185.90	1.80		669.24		
	8th cross road	Sqm	2	175.90	1.80		633.24		
	Sub Total						**4212.14**		

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	Consider 5% Qnty for Refixing						**210.61**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**210.61**	**825.74**	**173906.79**
4	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1	Cum					651.81		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.50 Tonne/Km.) For 15 Kms = (2.00 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00						
	Basic rate							116.00	
	Area weightage 6%							6.96	
	Total						**651.81**	**122.96**	**80147.10**
5	KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by road roller attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM of machineries complete as per specifications. MORTH / Chapter 3(P.No.147, I.No.19.56)								
	GANESHA LAYOUT								
	Sri ram shrayas appartment, Telecom main road (more junction to dead end)	Sqm	1	45.10	6.00		270.60		
	6th cross road	Sqm	1	169.84	6.00		1019.04		
	Basic rate							29.00	
	Area weightage 6%							1.74	
	Total						**1289.64**	**30.74**	**39643.53**
6	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)								
	Road cutting portions								
	GANESHA LAYOUT								
	Sri ram shrayas appartment, Telecom main road (more junction to dead end)	Sqm	1	45.10	6.00		270.60		
	6th cross road	Sqm	1	169.84	4.95		840.71		
	Basic rate							13.00	
	Area weightage 6%							0.78	
	Total						**1111.31**	**13.78**	**15313.82**
7	**KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications.** As per MORTH specification clause No. 502. (P.No.161, I.No.21.6)								
	Considered same Above Qty	**Sqm**					1111.31		

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	Basic rate							26.00	
	Area weightage 6%							1.56	
	Total						1111.31	27.56	30627.65
8	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6)								
	GANESHA LAYOUT								
	Sri ram shrayas appartment, Telecom main road (more junction to dead end)	Cum	1	45.10	6.00	0.050	13.53		
	6th cross road	Cum	1	169.84	4.95	0.050	42.04		
	Sub Total						**55.57**		
	Consider 5% qty for Profile correction and Dipression filling						**2.78**		
	Basic rate							6717.00	
	Area weightage 6%							403.02	
	Total						**58.34**	**7120.02**	**415408.10**
9	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	GANESHA LAYOUT								
	Sri ram shrayas appartment, Telecom	Sqm	1	638.40	8.35		5330.64		
	6th cross road	Sqm	1	45.10	6.00		270.60		
	7th cross road	Sqm	1	169.84	4.95		840.71		
	8th cross road	Sqm	1	185.90	5.00		929.50		
	10th cross road	Sqm	1	175.90	5.10		897.09		
	unnamaed Road (ganesh Main Road to dead end)	Sqm	1	49.50	4.95		245.03		
	unnamaed Road (ganesh Main Road to dead end)	Sqm	1	24.64	3.40		83.78		
	Basic rate			28.05	4.00		112.20		
	Area weightage 6%							3.00	
	Total							0.18	
							8709.54	**3.18**	**27696.33**
10	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7) .								
	For Road surface								
	GANESHA LAYOUT								
	Sri ram shrayas appartment, Telecom	Sqm	1	638.40	8.35		5330.64		
	6th cross road	Sqm	1	45.10	6.00		270.60		
	7th cross road	Sqm	1	169.84	4.95		840.71		
	8th cross road	Sqm	1	185.90	5.00		929.50		
	10th cross road	Sqm	1	175.90	5.10		897.09		
		Sqm	1	49.50	4.95		245.03		

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	unnamaed Road (ganesh Main Road to dead end)	Sqm	1	24.64	3.40		83.78		
	unnamaed Road (ganesh Main Road to dead end)	Sqm	1	28.05	4.00		112.20		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						**8709.54**	**12.72**	**110785.34**
11	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6)								
	GANESHA LAYOUT								
	Sri ram shrayas	Cum	1	638.40	8.35	0.04	213.23		
	appartment, Telecom	Cum	1	45.10	6.00	0.04	10.82		
	6th cross road	Cum	1	169.84	4.95	0.04	33.63		
	7th cross road	Cum	1	185.90	5.00	0.04	37.18		
	8th cross road	Cum	1	175.90	5.10	0.04	35.88		
	10th cross road	Cum	1	49.50	4.95	0.04	9.80		
	unnamaed Road (ganesh Main Road to dead end)	Cum	1	24.64	3.40	0.04	3.35		
	unnamaed Road (ganesh Main Road to dead end)	Cum	1	28.05	4.00	0.04	4.49		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	GANESHA LAYOUT								
	Sri ram shrayas	Cum	1	638.40	8.35	0.04	21.32		
	appartment, Telecom	Cum	1	45.10	6.00	0.04	1.08		
	6th cross road	Cum	1	169.84	4.95	0.04	3.36		
	7th cross road	Cum	1	185.90	5.00	0.04	3.72		
	8th cross road	Cum	1	175.90	5.10	0.04	3.59		
	10th cross road	Cum	1	49.50	4.95	0.04	0.98		
	unnamaed Road (ganesh Main Road to dead end)	Cum	1	24.64	3.40	0.04	0.34		
	unnamaed Road (ganesh Main Road to dead end)	Cum	1	28.05	4.00	0.04	4.49		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						**387.26**	**8118.54**	**3143977.00**
12	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	387.26	117.00	**3624.74**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**3624.74**	**28.62**	**103740.16**
13	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	GANESHA LAYOUT								

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Sri ram shrayas	Sqm	2	638.40	0.10		127.68		
appartment, Telecom	Sqm	2	45.10	0.10		9.02		
6th cross road	Sqm	2	169.84	0.10		33.97		
7th cross road	Sqm	2	185.90	0.10		37.18		
8th cross road	Sqm	2	175.90	0.10		35.18		
10th cross road	Sqm	2	49.50	0.10		9.90		
unnamaed Road (ganesh Main Road to dead end)	Sqm	2	24.64	0.10		4.93		
unnamaed Road (ganesh Main Road to dead end)	Sqm	2	28.05	0.10		5.61		
Basic rate							512.00	
Area weightage 6%							30.72	
Total						263.47	542.72	142988.27
							Sub Total	4406550.14
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)							90000
							Miscellenious and rounding	3450
							TOTAL AMOUNT	4500000
	RUPEES FORTY FIVE LAKHS ONLY							

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

AE

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

Executive Engineer
Byatarayanapura Division
Yalahanka Zone, B.B.M.P.
Bangalore-560092

Technical Sanction
Accorded For RS 45:00 lacks only
Head of A/C P3158
CER NO 50 Dt: 29/01/18

TA

CE (YNK)

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19) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT NTI LAYOUT, DEFENCE LAYOUT, BEL LAYOUT AND SURROUNDING AREAS IN WARD NO. 09 (VIDYARANYAPURA), VIDYARANYAPURA SUB DIVISION

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BRUHAT BANGALORE MAHANAGARA PALIKE

PREPARATION OF DPR FOR PACKAGE NO. 03

(PACKAGE CONSISTS OF 21 WORKS IN WARD NO 08 AND WARD NO 09)

NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT NTI LAYOUT, DEFENCE LAYOUT, BEL LAYOUT AND SURROUNDING AREAS IN WARD NO. 09 VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	NTI LAYOUT								
	3rd Cross Road	Cum	2	239	0.60	0.40	114.82		
	11th Main Road	Cum	2	240	0.70	0.40	134.29		
	10th Main Road	Cum	2	196	0.70	0.40	109.48		
	6th Cross Road	Cum	2	136	0.60	0.40	65.14		
	BEL LAYOUT								
	6th Block 1B Cross Road	Cum	2	48	0.70	0.40	26.66		
	3th Block 11B Cross Road	Cum	2	278	0.50	0.40	111.32		
	1st Block 3rd Main Road	Cum	2	178	0.60	0.40	85.54		
	1st Block 7th Cross Road	Cum	2	132	0.70	0.40	74.03		
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to dead end	Cum	2	464.00	0.70	0.40	259.84		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**981.11**	**166.42**	**163276.26**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Open Drain (Sides & Bottom)	Width=Perimeter of Drain in U Shape							
	Drain slab								
	NTI LAYOUT								
	3rd Cross Road	Sqm	2	239	1.80		861.12		
	11th Main Road	Sqm	2	240	1.80		863.28		
	10th Main Road	Sqm	2	196	1.80		703.80		
	6th Cross Road	Sqm	2	136	1.80		488.52		
	BEL LAYOUT								
	6th Block 1B Cross Road	Sqm	2	48	1.80		171.40		
	3th Block 11B Cross Road	Sqm	2	278	1.80		1001.88		
	1st Block 3rd Main Road	Sqm	2	178	1.80		641.52		
	1st Block 7th Cross Road	Sqm	2	132	1.80		475.92		
	Closed Drain								
	Cover Slab								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to dead end	Sqm	2	464.00	0.70		649.60		
	Sub Total						**5857.04**		

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	Consider 5% Qnty for Removing						**292.85**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**292.85**	**65.72**	**19246.22**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Cover Slab								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to dead end	Sqm	2	464.00	0.70		649.60		
	Sub Total						**649.60**		
	Consider 30% Qnty for Removing & Refixing						**194.88**		
	Basic rate							76.00	
	Area weightage 6%							4.56	
	Total						**194.88**	**80.56**	**15699.53**
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete.(P.No.25,I.No.5.31.1)								
	Closed Drain								
	Cover Slab								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to dead end	Sqm	2	464.00	0.70		649.60		
	Sub Total						**649.60**		
	Consider 5% Qnty for Refixing						**32.48**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**32.48**	**665.68**	**21621.29**
5	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete.(P.No.25,I.No.5.31.2)								
	Open Drain (Sides & Bottom)								
	Drain slab								
	NTI LAYOUT								
	3rd Cross Road	Sqm	2	239	1.80		861.12		
	11th Main Road	Sqm	2	240	1.80		863.28		
	10th Main Road	Sqm	2	196	1.80		703.80		
	6th Cross Road	Sqm	2	136	1.80		488.52		
	BEL LAYOUT								
	6th Block 1B Cross Road	Sqm	2	48	1.80		171.40		
	3th Block 11B Cross Road	Sqm	2	278	1.80		1001.88		
	1st Block 3rd Main Road	Sqm	2	178	1.80		641.52		
	1st Block 7th Cross Road	Sqm	2	132	1.80		475.92		
	Sub Total						**5207.44**		
	Consider 5% Qnty for Refixing						**260.37**		
	Basic rate							779.00	
	Area weightage 6%							46.74	

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	Total						**260.37**	**825.74**	**214999.41**
6	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								
	Considered same Qty vide I.No.1+I.No.13	Cum					1294.31		
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.00 Tonne/Km.) For 15 Kms = (2.50 x 1.28 x 15)/-		48.00						
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00						
	Total rate per Cum		116.00					116.00	
	Basic rate							6.96	
	Area weightage 6%								
	Total						**1294.31**	**122.96**	**159148.31**
7	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	NTI LAYOUT								
	3rd Cross Road	Sqm	1	239.20	5.20		1243.84		
	11th Main Road	Sqm	1	239.80	5.70		1366.86		
	10th Main Road	Sqm	1	195.50	5.70		1114.35		
	6th Cross Road	Sqm	1	135.70	7.00		949.90		
	BEL LAYOUT								
	6th Block 1B Cross Road	Sqm	1	47.61	5.40		257.09		
	3th Block 11B Cross Road	Sqm	1	278.30	4.50		1252.35		
	1st Block 3rd Main Road	Sqm	1	178.20	5.40		962.28		
	1st Block 7th Cross Road	Sqm	1	132.20	4.30		568.46		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**7715.13**	**3.18**	**24534.13**
8	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7)								
	For Road surface								
	NTI LAYOUT								
	3rd Cross Road	Sqm	1	239.20	5.20		1243.84		
	11th Main Road	Sqm	1	239.80	5.70		1366.86		
	10th Main Road	Sqm	1	195.50	5.70		1114.35		
	6th Cross Road	Sqm	1	135.70	7.00		949.90		
	BEL LAYOUT								
	6th Block 1B Cross Road	Sqm	1	47.61	5.40		257.09		
	3th Block 11B Cross Road	Sqm	1	278.30	4.50		1252.35		
	1st Block 3rd Main Road	Sqm	1	178.20	5.40		962.28		

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	1st Block 7th Cross Road	Sqm	1	132.20	4.30		568.46		
	Basic rate							12.00	
	Area weightage 6%							0.72	
	Total						7715.13	12.72	98136.50
9	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165								
	NTI LAYOUT								
	3rd Cross Road	Cum	1	239.20	5.20	0.04	49.75		
	11th Main Road	Cum	1	239.80	5.70	0.04	54.67		
	10th Main Road	Cum	1	195.50	5.70	0.04	44.57		
	6th Cross Road	Cum	1	135.70	7.00	0.04	38.00		
	BEL LAYOUT								
	6th Block 1B Cross Road	Cum	1	47.61	5.40	0.04	10.28		
	3th Block 11B Cross Road	Cum	1	278.30	4.50	0.04	50.09		
	1st Block 3rd Main Road	Cum	1	178.20	5.40	0.04	38.49		
	1st Block 7th Cross Road	Cum	1	132.20	4.30	0.04	22.74		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	NTI LAYOUT								
	3rd Cross Road	Cum	1	239.20	5.20	0.04	4.98		
	11th Main Road	Cum	1	239.80	5.70	0.04	5.47		
	10th Main Road	Cum	1	195.50	5.70	0.04	4.46		
	6th Cross Road	Cum	1	135.70	7.00	0.04	3.80		
	BEL LAYOUT								
	6th Block 1B Cross Road	Cum	1	47.61	5.40	0.04	1.03		
	3th Block 11B Cross Road	Cum	1	278.30	4.50	0.04	5.01		
	1st Block 3rd Main Road	Cum	1	178.20	5.40	0.04	3.85		
	1st Block 7th Cross Road	Cum	1	132.20	4.30	0.04	2.27		
	Basic rate							7659.00	
	Area weightage 6%							459.54	
	Total						339.47	8118.54	2755967.46
10	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		8%	339.47	117.00	3177.40		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						3177.40	28.62	90937.21
11	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	NTI LAYOUT								
	3rd Cross Road	Sqm	2	239.20	0.10		47.84		
	11th Main Road	Sqm	2	239.80	0.10		47.96		
	10th Main Road	Sqm	2	195.50	0.10		39.10		
	6th Cross Road	Sqm	2	135.70	0.10		27.14		
	BEL LAYOUT								

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	6th Block 1B Cross Road	Sqm	2	47.61	0.10		9.52		
	3th Block 11B Cross Road	Sqm	2	278.30	0.10		55.66		
	1st Block 3rd Main Road	Sqm	2	178.20	0.10		35.64		
	1st Block 7th Cross Road	Sqm	2	132.20	0.10		26.44		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						289.30	542.72	157009.98
12	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18,47)								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to dead end	Cum	1	464.00	4.50	0.15	313.20		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						313.20	827.86	259285.75
13	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to dead end	Cum	1	464.00	4.50	0.15	313.20		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						313.20	3986.66	1248621.91
14	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1								
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to dead end	Cum	1	464.00	4.50	0.15	313.20		
	Sub Total						**313.20**		
	Consider 5% qty for camber correction						**15.66**		
	Basic rate							5866.00	

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	Area weightage 6%								
	Total							351.96	
15	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)						**328.86**	**6217.96**	**2044838.33**
	KEMPEGOWDA NAGAR								
	Kempegowda nagar main road to dead end	Sqm	2	464.00	0.10		92.80		
	Basic rate							647.00	
	Area weightage 6%							38.82	
	Total						**92.80**	**685.82**	**63644.10**
								Sub Total	**7336966.38**
	Preperation of DPR And Project management Consultancy Charges(2% of estimated cost)								150000
	Miscellenious and rounding								13034
								TOTAL AMOUNT	**7500000**
	RUPEES SEVENTY FIVE LAKHS ONLY								

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

AE

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

Executive Engineer
Byatarayanapura Division
Yalahanka Zone, B.B.M.P.
Bangalore-560092

Technical Sanction
Accepted for Rs 75: w.b.c.h.only
Head of Account P3158
CER NO :51 Dt:29/01/18

TA — AE (YNK)

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